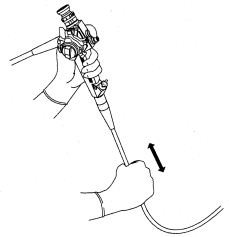
OSF-3 Sigmoidofiberscope

Testing Guidelines

The following Testing Guidelines cover the OSF3 SIgmoidofiberscope. The starting point for these guidelines is a disinfected/sterilized endoscope and disinfected/sterilized applicable accessories. Refer to the ***OLYMPUS OSF-3 REPROCESSING MANUAL*** for information on disinfection/sterilization procedures for this instrument.

Test	Steps	Test Result
1. Check Light Source	✓ Ensure the light source is properly powered and configured. ☝ See Also: Light source Instructions Manual	Acceptable light source operation
2. Check Suction Pump	✓ Ensure the suction pump is properly powered and configured. ✓ See Also: Suction pump Instructions Manual	Acceptable suction pump operation
3. Check Control Section And Light Guide Connector Section For Damage And Defects	✓ Ensure control section and light guide connector section are free of any defects.	Acceptable control section and light guide connector section
4. Check Boot And Nearby Insertion Tube	✓ Ensure there are no bends, twists, or other irregularities.	Acceptable boot and nearby tube
5. Check Insertion Tube Surface	✓ Carefully running your fingertips over the entire length, ensure the insertion tube is free of dents, bulges, swelling, or other irregularities.	
6. Check Bending Mechanism Covering	✓ Ensure the rubber covering on the bending section is free of sagging, swelling, cuts, hole, or other irregularities.	Acceptable covering

OLYMPUS AMERICA INC.

Two Corporate Center Drive, Melville, NY 11747

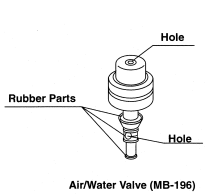
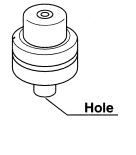
Copyright 1998, Olympus America Inc.

Test	Steps	Test Result
7. Check Bending Mechanism Play	✓ Loosely holding the bending section midpoint and a point 20 cm from the distal end, gently try to wiggle the section to ensure there is no play.	No play in bending section
8. Check Distal End Components	✓ Ensure the objective lens and air/water nozzle are clean and the insertion tube is free of dents, bulges, swellings, or other irregularities.	Acceptable distal end.
9. Check Eyepiece	✓ Ensure eyepiece and control section are securely connected. ✓ Ensure the diopter adjustment ring rotates smoothly	Acceptable eyepiece connection. Acceptable ring movement
10. Check UP/DOWN **Bending Mechanism**	✓ Ensure the UP/DOWN angulation lock is in the **F** position. Then slowly turn the UP/DOWN angulation control knob in each direction until it stop. ✓ Slowly turn the UP/DOWN angulation control knob back to neutral. ✓ Turn the UP/DOWN angulation lock in the opposite direction of the **F** mark, then turn the UP/DOWN angulation control knob in the **U** or **D** direction until it stops and remove your hand from the knob. ✓ Turn the UP/DOWN angulation lock in the **F** direction and remove your hand from the knob.	Bending section angulates correctly and smoothly, and achieves maximum deflection. Bending section returns smoothly to a straight position. Angle of bending roughly stabilizes on removing hand. Bending section straightens out on removing hand.

OLYMPUS AMERICA INC.

Two Corporate Center Drive, Melville, NY 11747

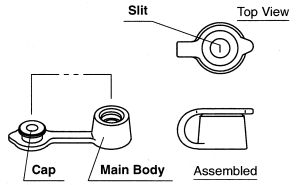
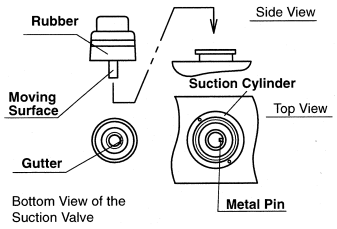
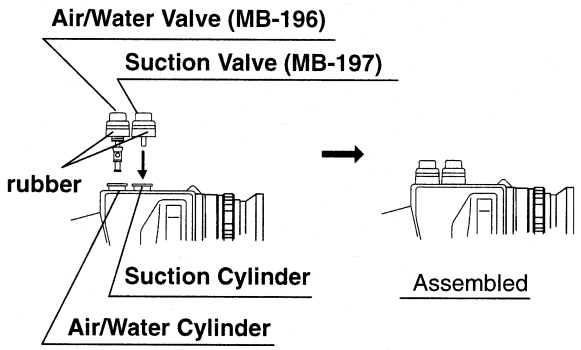
Copyright 1998, Olympus America Inc.

Test	Steps	Test Result
11. Check RIGHT/LEFT Bending Mechanism	✓ Ensure the **RIGHT/LEFT** angulation lock is in the **F** position. Then slowly turn the **RIGHT/LEFT** angulation control knob in each direction until it stop.	Bending section angulates correctly and smoothly, and achieves maximum deflection.
	✓ Slowly turn the **RIGHT/LEFT** angulation control knob back to neutral.	Bending section returns smoothly to a straight position.
	✓ Turn the **RIGHT/LEFT** angulation lock in the opposite direction of the **F** mark, then turn the **RIGHT/LEFT** angulation control knob in the **U** or **D** direction until it stops and remove your hand from the knob.	Angle of bending roughly stabilizes on removing hand.
	✓ Turn the **RIGHT/LEFT** angulation lock in the **F** direction and remove your hand from the knob.	Bending section straightens out on removing hand.
12. Check MB-196 Air/Water Valve And MD-197 Suction Valve Holes	✓ Ensure all holes are clean and clear.	 Air/Water Valve (MB-196)  Suction Valve (MB-197) Acceptably clear and clean holes
13. Check Air/Water and Suction Valve Housing	✓ Ensure valves are not cracked or deformed.	Acceptable valve structure
14. Check Air/Water and Suction Rubber Parts	✓ Ensure rubber parts are free of excessive scratching and any tears.	Acceptable condition of rubber parts
15. Check MB-358 Biopsy Valve Structure	✓ Ensure valve is not cracked, torn, or deformed.	Acceptable valve structure

OLYMPUS AMERICA INC.

Two Corporate Center Drive, Melville, NY 11747

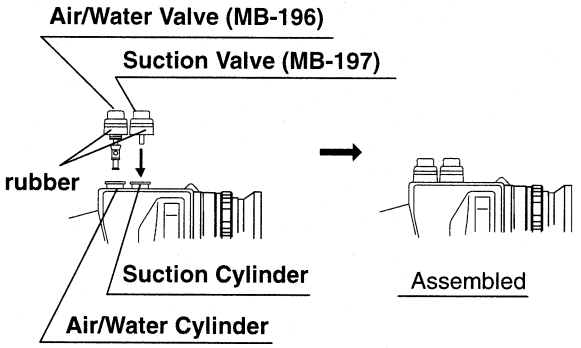
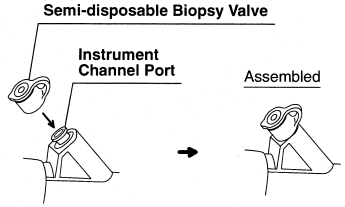
Copyright 1998, Olympus America Inc.

Test	Steps	Test Result
16. Check Biopsy Valve Cap Installation	✓ Ensure cap is secure.	 Secure valve cap
17. Check Suction Valve Attachment	✓ Apply a small amount of lubricant to the moving surface. ✓ Align the gutter on the underside of the valve with the metal pin in the suction cylinder. ✓ Attach the valve to the suction cylinder of the endoscope, ensuring there is a firm fit with no bulging of the rubber parts.	  Properly attached suction valve.

OLYMPUS AMERICA INC.

Two Corporate Center Drive, Melville, NY 11747

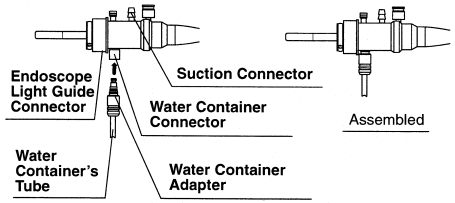
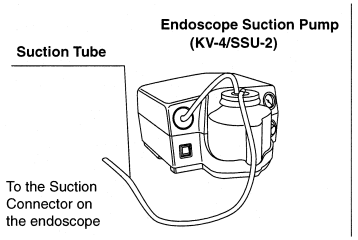
Copyright 1998, Olympus America Inc.

Test	Steps	Test Result
18. Check Air/Water Valve Attachment	✓ Apply a small amount of lubricant to the rubber parts. ✓ Attach the valve to the air/water cylinder of the endoscope, ensuring there is a firm fit with no bulging of the rubber parts.	 Properly attached air/water valve.
19. Check Biopsy Valve Attachment	✓ Attach the biopsy valve to the instrument channel port on the endoscope, ensuring the cap fits firmly without bulging.	 Properly attached biopsy valve.
20. Check Ancillary Equipment	✓ Connect the water container adapter to the water container connector. ✓ Ensure that the water container and suction line are connected to the fiberscope and that the light guide connector is connected to the output socket. Turn on the light source and suction pump.	

OLYMPUS AMERICA INC.

Two Corporate Center Drive, Melville, NY 11747

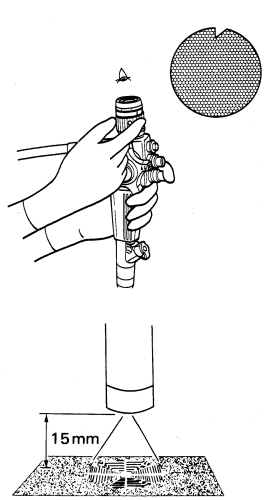
Copyright 1998, Olympus America Inc.

Test	Steps	Test Result
21. Check Ancillary Equipment	✓ Connect the water container adapter to the water container connector. ✓ Ensure that the water container and suction line are connected to the fiberscope and that the light guide connector is connected to the output socket. Turn on the light source and suction pump.	 

OLYMPUS AMERICA INC.

Two Corporate Center Drive, Melville, NY 11747

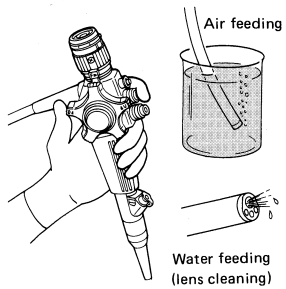
Copyright 1998, Olympus America Inc.

Test	Steps	Test Result
22. Check Optical System	✓ Using 70% alcohol and clean gauze, wipe the electrical contacts and lens surface ✓ On the light source, rotate the output socket ring fully clockwise (blue dot visible) and plug the light guide connector into the output socket. Turn on light source and adjust light level. ✓ Turn the diopter adjustment ring until the fiber pattern is clearly focused. Ensure an object approximately 15 mm away from the objective lens can be visualized clearly.	Clean contacts and lens Light source operating at acceptable level  Inspecting optical system Clear image

OLYMPUS AMERICA INC.

Two Corporate Center Drive, Melville, NY 11747

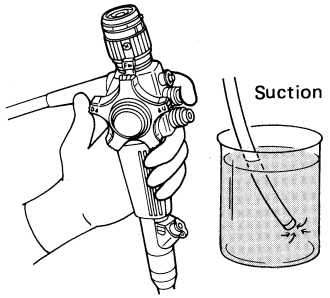
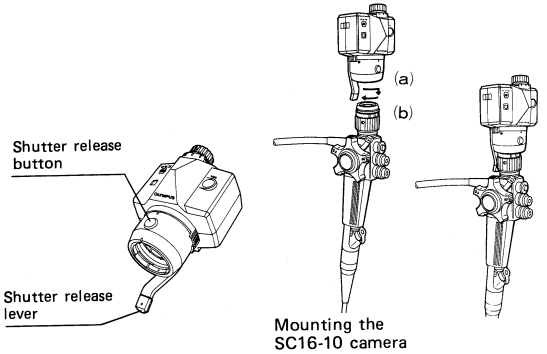
Copyright 1998, Olympus America Inc.

Test	Steps	Test Result
23. Check Air Feed	✓ Set the light source airflow regulator switch to High and immerse the distal end of the insertion tube 10 cm in sterile water. ✓ On the air/water valve, cover the hole with your finger. ✓ Uncover the hole.	No air bubbles emerge when air/water valve is not operating. Air bubbles emerge continuously with Hole covered. Air bubbles cease. 
24. Check Water Feed (Lens Cleaning)	✓ Again on the air/water valve, cover the hole with your finger. ✓ Release the valve. ✓ Now feed air to the nozzle by covering the hole in the air/water valve.	Observe water flow over lens. Water flow stops and valve returns smoothly to original position. Air flow clears lens.

OLYMPUS AMERICA INC.

Two Corporate Center Drive, Melville, NY 11747

Copyright 1998, Olympus America Inc.

Test	Steps	Test Result
25. Check Suction	✓ With suction connected, immerse the distal end of the insertion tube in sterile water and press the suction valve. ✓ Release the valve. ✓ Remove the distal end of the insertion tube from the water and press the suction valve for several seconds.	Water continually aspirates into suction pump suction bottle Valve returns smoothly to original position Air aspirates instrument channel. 
26. Check Automatic Exposure System	✓ Mount the camera by roughly aligning the yellow dots on the camera and eyepiece. Rotate the camera until it seats and then rotate it approximated an addition 1/8 turn until it locks. Adjust light source output to minimum. ✓ Hold distal end 1 cm from a white surface and press the camera shutter release. Ensure there is a momentary increase in light intensity. ✓ Repeat the above step at distances between 5 and 50 mm. Ensure flash duration increases with distance.	 Acceptable automatic exposure system

OLYMPUS AMERICA INC.

Two Corporate Center Drive, Melville, NY 11747

Copyright 1998, Olympus America Inc.